CLAIMS

1. A method for inhibiting cell functioning for use in anti-inflammatory and anti-tumor therapies in the body of a warm-blooded living being, which comprises administering to said being a drug comprising, in a quantity effective for said therapies, a substance that specifically recognizes the extracellular domain of SIRP (anti-SIRP substance) and that inhibits the functioning of pathologic myeloid cells.

2. The method as claimed in claim 1, wherein said substance inhibits the functioning of macrophages by suppressing their activation by a factor of at least 10 as measured by each of the following macrophage activity tests: (i) the production of nitric oxide (NO), (ii) the production of reactive oxygen species, and (iii) the production of tumor necrosis factor - alpha (TNF-α).

3. The method as claimed in claim 1, wherein said substance inhibits the functioning of pathologic myeloid cells by suppressing the division of macrophage tumor cell lines by a factor of at least 10 as measured by the macrophage division test.

4. The method as claimed in claim 1 for treating pathologies selected from inflammations caused by autoimmune diseases or by allergies, and myeloid leukemia.

5. The method as claimed in claim 1, wherein said substance inhibits the functioning of macrophages by temporally suppressing their phagocytosis as measured by the macrophage phagocytosis test.

6. The method as claimed in claim 5 for improving the efficacy of gene-targeted therapies.

7. The method as claimed in claim 1, characterized in that said anti-SIRP substance is selected from the group consisting of Fab-fragments of monoclonal antibodies and (bio)chemically modified products of such fragments wherein the intended anti-SIRP activity has been maintained.

8. The method as claimed in claim 7, wherein said anti-SIRP substance is a Fab-fragment of monoclonal antibody ED9 or ED17, or said modified product thereof.

9. Use of a substance, that specifically recognizes the extracellular domain of SIRP (anti-SIRP substance) and that inhibits the functioning of pathologic myeloid cells, for the manufacture of a drug for inhibiting cell functioning for use in anti-inflammatory and anti-tumor therapies.

10. The use as claimed in claim 9, wherein the anti-SIRP substance is selected from the group consisting of Fab-fragments of monoclonal antibodies, preferably of ED9 or ED17, and (bio)chemically modified products of such fragments wherein the intended anti-SIRP activity has been maintained.

11. A drug comprising, in addition to a pharmaceutically acceptable carrier and, if desired, one or more pharmaceutically acceptable adjuvants, as the active substance an anti-SIRP substance that inhibits the functioning of pathologic myeloid cells.

12. A drug as claimed in claim 11, wherein the anti-SIRP substance is selected from the group consisting of Fab-fragments of monoclonal antibodies, preferably of ED9 or ED17, and (bio)chemically modified products of such fragments wherein the intended anti-SIRP activity has been maintained.

13. An anti-SIRP substance that inhibits the functioning of pathologic myeloid cells, selected from the group consisting of Fab-fragments of monoclonal antibodies, preferably of ED9 or ED17, and (bio)chemically modified products of such fragments wherein the intended anti-SIRP activity has been maintained.

14. A method to detect a substance interacting with SIR and inhibiting the functioning of pathologic myeloid cells, said method comprising the steps of:

a) providing a cell line expressing SIRP on its membrane,

b) stimulating the production of pro-inflammatory cytokines,

c) contacting the substance of interest with the stimulated cell line, and

d) measuring the change in production of inflammatory mediators.